



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: September 7, 2007

Effective Date: September 7, 2007

Expiration Date: March 31, 2009

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 06-05069L

Federal Tax Id - Plant Code: 23-1315454-1

Plan Approval Description

This permit is issued for the installation of activated carbon vessels to control the HAP emissions from the miscellaneous metal parts coating operation (Source 603).

Owner Information

Name: EAST PENN MANUFACTURING COMPANY, INC.
Mailing Address: DEKA RD
PO BOX 147
LYON STATION, PA 19536

Plant Information

Plant: EAST PENN MFG CO INC/BATTERY ASSEMBLY
Location: 06 Berks County 06953 Richmond Township
SIC Code: 3691 Manufacturing - Storage Batteries

Responsible Official

Name: TROY GREISS
Title: DIR, ENV HEALTH & SAFETY
Phone: (610) 682 - 6361

Plan Approval Contact Person

Name: ERIC G PEFFEL
Title: ENV H&S ENGINEER
Phone: (610) 682 - 6361

[Signature] _____
WILLIAM R WEAVER, SOUTHCENTRAL REGION AIR PROGRAM MANAGER



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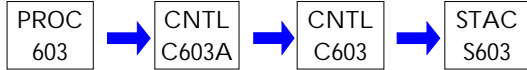


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**SECTION A. Plan Approval Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
603	SMALL PARTS COATING OPERATION	3.510 Lbs/HR	PERCHLOROETHYLENE
C603	ADSORPTION: SMALL PARTS COATING		
C603A	DRY FILTERS: SMALL PARTS COATING		
S603	STACK: SMALL PARTS COATING		

PERMIT MAPS

SECTION B. General Plan Approval Requirements

#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this plan approval shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.12b (a) (b)]

Future Adoption of Requirements

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]

Plan Approval Temporary Operation

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 15 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 120 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]

Content of Applications

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]

Public Records and Confidential Information

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

SECTION B. General Plan Approval Requirements

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.13]

Plan Approval Extensions

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension should be postmarked at least thirty (30) days prior to the expiration date. The Department will not issue an extension after the plan approval expires. The request for an extension should include the following:

- (i) A justification for the extension,
- (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted.

#007 [25 Pa. Code § 127.32]

Transfer of Plan Approvals

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(4) & 35 P.S. § 4008 & § 114 of the CAA]

Inspection and Entry

(a) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as

SECTION B. General Plan Approval Requirements

the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.

(c) Nothing in this plan approval condition shall limit the ability of the Environmental Protection Agency to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#009 [25 Pa. Code 127.13a]

Plan Approval Changes for Cause

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

(a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.

(b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(c) The permittee fails to submit a report required by this plan approval.

(d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

(a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#011 [25 Pa. Code § 127.12c]

Submissions

Reports, test data, monitoring data, notifications shall be submitted to the:

Regional Air Program Manager

PA Department of Environmental Protection

(At the address given on the plan approval transmittal letter or otherwise notified)

#012 [25 Pa. Code § 127.12(9) & 40 CFR Part 68]

Risk Management

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels

SECTION B. General Plan Approval Requirements

Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this plan approval condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

SECTION C. Site Level Plan Approval Requirements

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

No person may permit the emission into the outdoor atmosphere of fugitive air contaminants from a source other than the following:

- a. Construction or demolition of buildings or structures.
- b. Grading, paving and maintenance of roads and streets.
- c. Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- d. Clearing of land.
- e. Stockpiling of materials.

Sources and classes of sources other than those identified in paragraphs (a) - (e), for which the operator has obtained a determination from the Department in accordance with 25 Pa. Code Section 123.1(b) that fugitive emissions from the source, after appropriate control, meet the following requirements:

- a. The emissions are of minor significance with respect to causing air pollution; and
- b. The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

002 [25 Pa. Code §123.2]

Fugitive particulate matter

No person shall permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in the preceding permit Condition #001, Section C, if such emissions are visible at the point the emissions pass outside the person's property.

003 [25 Pa. Code §123.31]

Limitations

No person shall emit any malodorous air contaminants into the outdoor atmosphere from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

II. TESTING REQUIREMENTS.

004 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured by using either of the following:

- a. A device approved by the Department and maintained to provide accurate opacity measurements.
- b. Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

SECTION C. Site Level Plan Approval Requirements

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Department reserves the right to require exhaust stack testing of any source as necessary during the permit term to verify emissions for purposes including emission fees, malfunctions or permit condition violations.

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this condition is derived from 40 CFR Part 60, Section 60.374, NSPS]

At least 60 days prior to the test, the permittee shall submit to the Department for approval, the procedures for the testing and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this condition is derived from 40 CFR Part 60, Section 60.374, NSPS]

At least 30 days prior to the testing, the Regional Air Quality Program Manager or a representative shall be informed of the date and time of the testing.

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this condition is derived from 40 CFR Part 60, Section 60.374, NSPS]

Within 60 days after the source testing, three copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Program Manager or a representative for approval.

009 [25 Pa. Code §139.1]

Sampling facilities.

Upon the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

III. MONITORING REQUIREMENTS.

010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall conduct a weekly inspection of the sources covered by this approval during the daylight hours when the facility is in production to detect visible emissions, fugitive emissions and malodors as follows:

a. Visible emissions in excess of the limits specifically stated in this permit in Section D and Section E. Visible emissions may be measured according to the methods specified in Condition #006, Section C. As an alternative, facility personnel who observe such visible emissions shall report each incident to the Department within two hours of each occurrence and



SECTION C. Site Level Plan Approval Requirements

make arrangements for a certified observer to read the visible emissions.

- b. Presence of visible fugitive emissions and fugitive particulate matter beyond the plant property boundaries, as stated in Condition #002, Section C.
- c. Presence of odors beyond the facility property boundaries that have the potential to be malodorous as stated in Condition #003, Section C.

IV. RECORDKEEPING REQUIREMENTS.

011 [25 Pa. Code §127.12b]

[Plan approval terms and conditions.](#)

The permittee shall record the results of the weekly inspections around the facility on the Department approved check sheets. The check sheets shall be made available to the Department upon request. The sheets shall be maintained in an acceptable manner.

V. REPORTING REQUIREMENTS.

012 [25 Pa. Code §127.12b]

[Plan approval terms and conditions.](#)

The permittee shall notify the Reading District Office of the initial startup of the new control device.

013 [25 Pa. Code §127.12b]

[Plan approval terms and conditions.](#)

[Additional authority for this permit condition is derived from 25 PA Code Chapter 122 and 40 CFR Part 60, Section 60.19, NSPS]

- a. The permittee shall report each malfunction to the Department that occurs with these sources. For purposes of this condition, a malfunction is any sudden, infrequent and not reasonably preventable failure of the air pollution control equipment, process equipment, or process to operate in a normal or usual manner that may result in an increase in air emissions above minor significance.
- b. When malfunctions pose an imminent danger to public health and safety or harm to the environment, the notification shall be submitted to the Department no later than two (2) hours after the incident is detected by the permittee.
 - 1. The notice shall describe the:
 - i. Name and location of the facility;
 - ii. Nature and cause of the malfunction or breakdown;
 - iii. Time when the malfunction or breakdown was first observed;
 - iv. Expected duration of excess emissions; and
 - v. Estimated rate of emissions.
 - 2. The permittee shall notify the Department immediately when corrective measures have been accomplished.

SECTION C. Site Level Plan Approval Requirements

3. Subsequent to the malfunction, the permittee shall submit a full report of the malfunction to the Department within fifteen (15) days, if requested.

c. Malfunctions shall be reported to the Department at the following address:

PA DEP, Reading District Office
Air Quality Program
1001 Cross Roads Blvd
Reading, Pa 19605

Telephone reports can be made to the Air Quality Program at 610-916-0100 during normal business hours or to the Department's Emergency Hotline 877-333-1904 at any time.

VI. WORK PRACTICE REQUIREMENTS.

014 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter from the sources identified in Condition #001, Section C from becoming airborne. These actions shall include, but not be limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads or the clearing of land.
- b. Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- c. Paving and maintenance of roadways.
- d. Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or other means.

VII. ADDITIONAL REQUIREMENTS.

015 [25 Pa. Code §123.42]

Exceptions

The limitations of opacity do not apply to a visible emission in any of the following instances:

- a. When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- b. When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- c. When the emission results from sources specified in Condition #001, Section C (relating to prohibition of certain fugitive emissions).

016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This plan approval is issued for the modification of the existing surface coating booths in a manner that they will be 100

SECTION C. Site Level Plan Approval Requirements

percent capture systems; and the installation of a carbon adsorption system for the control of evaporative emissions from the coating operation.

017 [25 Pa. Code §129.14]

Open burning operations

No person shall conduct open burning of materials in such a manner that:

- a. The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- b. Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
- c. The emissions interfere with the reasonable enjoyment of life and property.
- d. The emissions cause damage to vegetation or property.
- e. The emissions are or may be deleterious to human or animal health.

These limits do not apply where the open burning operations result from the following:

- a. A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
- b. Any fire set for the propose of instructing personnel in fire fighting as approved by the Department, provided the permittee has notified the Department of the date, time and place of the training.
- c. A fire set for the prevention and control of disease or pests, when approved by the Department.
- d. A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- e. A fire set solely for recreational or ceremonial purposes.
- f. A fire set solely for cooking food.

This permit does not constitute authorization to burn solid waste pursuant to Section 610(3) of the Solid Waste Management Act, 35 P. S. Section 6018.610(3), or any other provision of the Solid Waste Management Act.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

**SECTION D. Source Level Plan Approval Requirements**

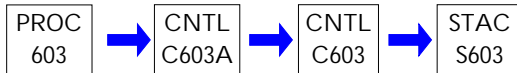
Source ID: 603

Source Name: SMALL PARTS COATING OPERATION

Source Capacity/Throughput:

3.510 Lbs/HR

PERCHLOROETHYLENE

**I. RESTRICTIONS.****Emission Restriction(s).**

001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3890]

Subpart M MMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What emission limits must I meet?

The permittee shall limit the emissions of organic Hazardous Air Pollutants (HAP) from the coating operation to 2.6 pounds of HAPs per gallon of coating solids used during each 12-month compliance period.

II. TESTING REQUIREMENTS.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall test the exhaust stream for HAP emissions using the method proposed by the permittee in their application during each of the three sampling periods as required in Condition #007.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3960]

Subpart M MMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

By what date must I conduct performance tests and other initial compliance demonstrations?

The permittee must complete the initial compliance demonstration for the initial compliance period according to the requirements of this approval and 40 CFR Section 63.3961. The initial compliance period begins no later than sixty (60) days after the use of a non-complying coating and ends on the last day of the 12th month following the start of the initial compliance period. If the compliance period begins on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. The permittee must determine the mass of organic HAP emissions and volume of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to this approval, 40 CFR Part 63 and Chapter 139; calculations according to this approval and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by this approval; and documentation of whether the permittee developed and implemented the work practice plan required by this approval and 40 CFR Part 63.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3960]

Subpart M MMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

By what date must I conduct performance tests and other initial compliance demonstrations?

SECTION D. Source Level Plan Approval Requirements

The permittee must conduct a performance test of each capture system and add-on control device according to this approval, 40 CFR Part 63 and the Department's Chapter 139; and establish the operating limits required by this approval no later than 60 days after the use of non-complying materials.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3964]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What are the general requirements for performance tests?

The permittee must conduct each performance test required by Conditions #003 and #004 according to the requirements in 40 CFR Section 63.7(e)(1) and under the conditions in this condition, unless the permittee obtains a waiver of the performance test according to the provisions in 40 CFR Section 63.7(h).

a. The permittee must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or malfunction and during periods of nonoperation do not constitute representative conditions. The permittee must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.

b. The permittee must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. The permittee must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

The permittee must conduct each performance test of an emission capture system according to the requirements in Condition #006. The permittee must conduct each performance test of an add-on control device according to the requirements in Condition #007.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3965]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

How do I determine the emission capture system efficiency?

The permittee must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by Conditions #003 and #004.

a. The permittee may assume the capture system efficiency is 100 percent if both of the conditions in paragraphs (a)(1) and (2) of this section are met:

1. The capture system meets the criteria in Method 204 of Appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.

2. All coatings, thinners and/or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3966]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

SECTION D. Source Level Plan Approval Requirements**How do I determine the add-on control device emission destruction or removal efficiency?**

The permittee must use the procedures and test methods in this condition to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by Conditions #003 and #004. The permittee must conduct three test runs as specified in 40 CFR Section 63.7(e)(3) and each test run must last at least 1 hour.

a. For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.

1. Use Method 1 or 1A of Appendix A to 40 CFR Part 60, as appropriate, to select sampling sites and velocity traverse points.
2. Use Method 2, 2A, 2C, 2D, 2F, or 2G of Appendix A to 40 CFR Part 60, as appropriate, to measure gas volumetric flow rate.
3. Use Method 3, 3A, or 3B of Appendix A to 40 CFR Part 60, as appropriate, for gas analysis to determine dry molecular weight.
4. Use Method 4 of Appendix A to 40 CFR Part 60, to determine stack gas moisture.
5. Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.

b. Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of Appendix A to 40 CFR Part 60.

1. Use Method 25 if the add-on control device is an oxidizer and the permittee expects the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.
2. Use Method 25A if the add-on control device is an oxidizer and the permittee expects the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.
3. Use Method 25A if the add-on control device is not an oxidizer.

c. If two or more add-on control devices are used for the same emission stream, then the permittee must measure emissions at the outlet to the atmosphere of each device. For example, if one add-on control device is a concentrator with an outlet to the atmosphere for the high-volume dilute stream that has been treated by the concentrator, and a second add-on control device is an oxidizer with an outlet to the atmosphere for the low-volume concentrated stream that is treated with the oxidizer, you must measure emissions at the outlet of the oxidizer and the high volume dilute stream outlet of the concentrator.

d. For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, the permittee must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions:

$$Mf = Qsd \times Cc \times (12) \times (0.0416) \times (0.000001) \quad (\text{Equation 1})$$

Where:

Mf = Total gaseous organic emissions mass flow rate, kg per hour (h).

Cc = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis.

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Qsd = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h).

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m³) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg).

e. For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = [(Mfi - Mfo) / Mfi] \times 100 \quad (\text{Equation 2})$$

Where:

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.

Mfi = Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h.

Mfo = Total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

f. Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this condition.

III. MONITORING REQUIREMENTS.

008 [25 Pa. Code §127.12b]

[Plan approval terms and conditions.](#)

Weekly the permittee shall read and record the pressure drop across the primary canister.

009 [25 Pa. Code §127.12b]

[Plan approval terms and conditions.](#)

The permittee shall weekly measure the amount of perchloroethylene in the exhaust exiting the primary carbon canister and secondary canister.

010 [25 Pa. Code §127.12b]

[Plan approval terms and conditions.](#)

The permittee shall read and record the pressure drop across each dry filter once each month.

IV. RECORDKEEPING REQUIREMENTS.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3930]

[Subpart M - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products](#)

[What records must I keep?](#)

The permittee must collect and keep records of the data and information specified below. Failure to collect and keep these records is a deviation from the applicable standard.

SECTION D. Source Level Plan Approval Requirements

a. A copy of each notification and report that the permittee submitted to comply with 40 CFR Subpart M, and the documentation supporting each notification and report. The permittee must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.

b. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If the permittee conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee must keep a copy of the complete test report. If the permittee uses information provided by the manufacturer or supplier of the material that was based on testing, the permittee must keep the summary sheet of results provided by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

c. For each compliance period, the records specified below.

For the emission rate with add-on controls option, records of the calculations specified below.

1. The calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of Condition #033 and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to 40 CFR Section 63.3951(e)(4);
2. The calculation of the total volume of coating solids used each month using Equation 2 of Condition #033;
3. The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of Condition #024 and Equations 2, 3, and 3A through 3C of Condition #024, as applicable;
4. The calculation of each month's organic HAP emission rate using Equation 4 of Condition #024; and
5. The calculation of each 12-month organic HAP emission rate using Equation 5 of Condition #024.

d. A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period.

e. A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight.

f. A record of the volume fraction of coating solids for each coating used during each compliance period.

g. The density for each coating, thinner and/or other additive, and cleaning material used during each compliance period.

h. If the permittee uses an allowance in Equation 1 of Condition #033 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to 40 CFR Section 63.3951(e)(4), you must keep records of the information specified below.

1. The name and address of each TSDF to which the permittee sends waste materials for which the permittee uses an allowance in Equation 1 of Condition #033; a statement of which subparts under 40 CFR Parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment.
2. Identification of the coating operations producing waste materials included in each shipment and the month or months in which the permittee used the allowance for these materials in Equation 1 of Condition #033.

SECTION D. Source Level Plan Approval Requirements

3. The methodology used in accordance with 40 CFR Section 63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.

i. The permittee must keep records of the date, time, and duration of each deviation.

j. If the permittee uses the emission rate with add-on controls option, the permittee must keep the records specified below.

1. For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

2. The records in 40 CFR Section 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

3. The records required to show continuous compliance with each operating limit specified in Table 1 of 40 CFR Subpart MMMM that applies to you.

4. For each capture system that is a PTE, the data and documentation the permittee used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in 40 CFR Section 63.3965(a).

5. For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in this approval, including the records specified below that apply.

A. Records for a liquid-to-uncaptured gas protocol using a temporary total enclosure or building enclosure. Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or 204F of appendix M to 40 CFR Part 51 for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or 204E of appendix M to 40 CFR Part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure.

B. Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure. Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or 204C of appendix M to 40 CFR Part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or 204E of appendix M to 40 CFR Part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure.

C. Records for an alternative protocol. Records needed to document a capture efficiency determination using an alternative method or protocol as specified in 40 CFR Section 63.3965(e), if applicable.

6. The records specified below for each add-on control device organic HAP destruction or removal efficiency determination as specified in 40 CFR Section 63.3966.

A. Records of each add-on control device performance test conducted according to 40 CFR Sections 63.3964 and 63.3966.

B. Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.

SECTION D. Source Level Plan Approval Requirements

7. Records of the data and calculations the permittee uses to establish the emission capture and add-on control device operating limits as specified in 40 CFR Section 63.3967 and to document compliance with the operating limits as specified in Table 1 of 40 CFR Part 63, Subpart MMMM.

8. A record of the work practice plan required by 40 CFR Section 63.3893 and documentation that the permittee is implementing the plan on a continuous basis.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3931]

Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

In what form and for how long must I keep my records?

The permittee must maintain all records for 5 years following the date of each occurrence, measurement, corrective action, report or record. These records must be maintained on site for at least 2 years. The records shall be retained in a manner approved by the Department.

V. REPORTING REQUIREMENTS.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3910]

Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What notifications must I submit?

The permittee shall submit the notifications in 40 CFR Sections 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to the source by the dates specified in those sections, except the initial notification.

The permittee must submit the notification of compliance status required by 40 CFR Section 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in this approval as it applies to the source. The notification of compliance status must contain the information specified below and in 40 CFR Section 63.9(h).

- a. Company name and address.
- b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- c. Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in this approval as it applies to the source.
- d. Identification of the compliance option or options that the permittee used on the coating operation during the initial compliance period.
- e. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.
- f. If source had a deviation, include the information below:
 1. A description and statement of the cause of the deviation.
 2. If the source failed to meet the applicable emission limit (Condition #001), include all the calculations used to determine the pounds of organic HAP emitted per gallon coating solids used. Information provided by the materials' suppliers or

SECTION D. Source Level Plan Approval Requirements

manufacturers, or test reports is not required.

g. For each of the data items listed below that is required by the compliance option used to demonstrate compliance with the emission limit, include an example of how the value was determined, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to this approval. Copies of any test reports are not required to be submitted.

1. Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.
2. Volume fraction of coating solids for one coating.
3. Density for one coating, one thinner and/or other additive, and one cleaning material, except that if used the compliant material option is used, only the example coating density is required.
4. The amount of waste materials and the mass of organic HAP contained in the waste materials for which the permittee is claiming an allowance in Equation 1 of Condition #033.

h. The calculation of pounds of organic HAP emitted per gallon coating solids used for the compliance option used, as specified below:

1. For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 2 of 40 CFR Section 63.3951.
2. For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total volume of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of Condition #033.
3. For the emission rate with add-on controls option, provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of Condition #033; the calculation of the total volume of coating solids used each month using Equation 2 of Condition #033; the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of Condition #024 and Equations 2, 3, and 3A through 3C of Condition #024 as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of Condition #024; and the calculation of the 12-month organic HAP emission rate using Equation 5 of Condition #024.

i. For the emission rate with add-on controls option, the permittee must include the information specified below.

1. For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the protocol followed for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If the permittee uses the data quality objective (DQO) or lower confidence limit (LCL) approach, the permittee must also include the statistical calculations to show the permittee met the DQO or LCL criteria in Appendix A to Subpart KK of 40 CFR Part 63. The permittee does not need to submit complete test reports.

2. A summary of the results of each add-on control device performance test. Complete test reports do not need to be submitted.

3. A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.

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4. A statement of whether or not the work practice plan required by this approval was developed and implemented.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3920]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What reports must I submit?

The permittee must submit semiannual compliance reports for each affected source according to the requirements below. The semiannual compliance reporting may be satisfied by reports required under other parts of the Clean Air Act.

a. Unless the Administrator has approved or agreed to a different schedule for submission of reports, the permittee must prepare and submit each semiannual compliance report according to the dates specified in below. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

1. The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.

2. Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

3. Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

4. For each affected source that is subject to the Title V permitting regulations, the permittee may submit the first and subsequent compliance reports according to the dates in the Title V permit.

b. If the source has obtained a Title V operating permit, the permittee must report all deviations as defined in Subpart A in the semiannual monitoring report. If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report, and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this permit, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

c. The semiannual compliance report must contain the information specified below, and the Startup, Shutdown, Malfunction Report of this condition that is applicable to the source.

1. Company name and address.

2. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

3. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

4. Identification of the compliance option or options specified in 40 CFR Section 63.3891 that is used on each coating operation during the reporting period. If options are switched during the reporting period, the beginning and ending dates

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for each option used must be reported.

5. If an emission rate is used without add-on controls or the emission rate with add-on controls compliance option, the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.

d. If there were no deviations from the emission limitations, that applies, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If the emission rate with add-on controls option is used and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in 40 CFR Section 63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.

e. If the compliant material option is used and there was a deviation from the applicable organic HAP content requirements, the semiannual compliance report must contain the following information.

1. Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.

2. The calculation of the organic HAP content (using Equation 2 of Condition #003) for each coating identified above. The permittee does not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).

3. The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified above. The permittee does not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).

4. A statement of the cause of each deviation.

f. If compliance is achieved without add-on controls and there was a deviation from the applicable emission limit, the semiannual compliance report must contain the following information.

1. The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit.

2. The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The permittee must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of Condition #033; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Condition #033. The permittee does not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

3. A statement of the cause of each deviation.

g. If compliance is achieved with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the following information. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

1. The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit.

2. The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. The permittee must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of Condition

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#033; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to Condition #033; the calculation of the total volume of coating solids used each month using Equation 2 of Condition #033; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of Condition #024, and Equations 2, 3, and 3A through 3C of Condition #024, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of Condition #024; and the calculation of the 12-month organic HAP emission rate using Equation 5 of Condition #024. The permittee does not need to submit the background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).

3. The date and time that each malfunction started and stopped.
4. A brief description of the CPMS.
5. The date of the latest CPMS certification or audit.
6. The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.
7. The date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR Section 63.8(c)(8).
8. The date and time period of each deviation from an operating limit in Table 1 of 40 CFR Subpart Mmmm; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
9. A summary of the total duration of each deviation from an operating limit in Table 1 of 40 CFR Subpart Mmmm and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.
10. A breakdown of the total duration of the deviations from the operating limits in Table 1 of 40 CFR Subpart Mmmm and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
11. A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.
12. A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.
13. For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions taken to correct the deviation.
14. A statement of the cause of each deviation.

015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3920]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What reports must I submit?

If the permittee achieves compliance with add-on controls option and has a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified below.

- a. If the actions were consistent with the startup, shutdown, and malfunction plan, the permittee must include the

**SECTION D. Source Level Plan Approval Requirements**

information specified in 40 CFR Section 63.10(d) in the semiannual compliance report.

b. If the actions were not consistent with the startup, shutdown, and malfunction plan, the permittee must submit an immediate startup, shutdown, and malfunction report as described below.

1. The permittee must describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Department within 2 working days after starting actions that are inconsistent with the plan.

2. The permittee must submit a letter to the Department within 7 working days after the end of the event, unless the permittee has made alternative arrangements with the Department as specified by 40 CFR Part 63. The letter must contain the information specified in 40 CFR Section 63.10(d)(5)(ii).

VI. WORK PRACTICE REQUIREMENTS.

016 [25 Pa. Code §127.12b]

[Plan approval terms and conditions.](#)

Equipment (a differential manometer or equivalent, as approved by the Department), shall be provided and maintained so that at any time the pressure drop across the primary carbon canister and dry filters can be measured.

017 [25 Pa. Code §127.12b]

[Plan approval terms and conditions.](#)

The primary canister shall be removed from the system or filled with fresh carbon within ten (10) days of the perchloroethylene breakthrough occurring in the primary canister. At the time of removal or refilling of the primary canister, the exhaust flow shall be switched so that the secondary canister is now the primary, and the new or refilled canister will become the secondary one.

018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3892]

[Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products](#)

[What operating limits must I meet?](#)

The permittee must meet the operating limits specified below. These operating limits apply to the emission capture and control systems on the coating operation, for which the permittee uses this option, and the permittee must establish the operating limits during the performance test according to the requirements in 40 CFR Section 63.3967. The Permittee must meet the operating limits at all times after establishing them.

a. The direction of the air flow at all times must be into the enclosure.

b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute, or the pressure drop across the enclosure must be at least 0.007 inch H₂O as established in Method 204 of Appendix M to 40 CFR Part 51.

If the permittee wishes to use an add on control device other than those listed in table 1 of 40 CFR Part 63, Subpart MMMM, or to monitor an alternative parameter and/or comply with a different operating limit, the permittee must apply to the Administrator for approval.

SECTION D. Source Level Plan Approval Requirements

019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3893]

Subpart M - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What work practice standards must I meet?

If the permittee uses an add-on control device, the permittee must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation for which the permittee uses this option. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified below are implemented. As an alternative, the permittee may request an alternative set of work practices. Any alternatives shall be approved by the US EPA.

- a. All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.
- b. Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.
- c. Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
- d. Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
- e. Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3900]

Subpart M - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What are my general requirements for complying with this subpart?

The permittee must be in compliance with the emission limitations in this subpart as specified below:

- a. The source must be in compliance with the emission limitations as specified below:
 1. The coating operation must be in compliance with the applicable emission limit at all times except during periods of startup, shutdown.
 2. The coating operation must be in compliance with the operating limits for emission capture systems and add-on control devices at all times except during periods of startup, shutdown, and malfunction or periods when the operation uses compliant materials or the emission rate meets the limit without add-on controls.
 3. The coating operation must be in compliance with the work practice standards of 40 CFR Section 63.3893 at all times.
- b. The permittee must always operate and maintain the source, including all air pollution control and monitoring equipment used for purposes of complying with the conditions of this approval according to the provisions in 40 CFR Section 63.6(e)(1)(i).
- c. If the source uses an emission capture system and add-on control device, the permittee must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in 40 CFR Section 63.6(e)(3). The plan must

SECTION D. Source Level Plan Approval Requirements

address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3942]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

How do I demonstrate continuous compliance with the emission limitations?

For each compliance period to demonstrate continuous compliance, the permittee must use no coating, thinner, additive and cleaning material that does not meet the organic HAP content limit, unless the HAP emissions are captured and controlled as required by 40 CFR Part 63, Subpart Mmmm.

022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3960]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

By what date must I conduct performance tests and other initial compliance demonstrations?

The permittee shall install the emission capture systems, add-on control devices, and CPMS before using any non-complying coatings, additives, thinners or cleaning agents.

023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3960]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

By what date must I conduct performance tests and other initial compliance demonstrations?

The permittee shall develop and begin implementing the work practice plan required by Condition #019 no later than sixty (60) days after the initial use of a non-complying coating.

024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3961]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

How do I demonstrate initial compliance?

The permittee may use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. The permittee may include both controlled and uncontrolled coating operations in a group for which the permittee uses this option. The permittee must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which the permittee does not use the emission rate with add-on controls option. To demonstrate initial compliance, the coating operation for which the permittee uses the emission rate with add-on controls option must meet the applicable emission limitations in Condition #001, #018 and #019. The permittee must demonstrate that all coating operations included in the predominant activity determination or calculations of the facility-specific emission limit comply with that limit. The permittee must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which the permittee uses the compliant material option or the emission rate without add-on controls option. The permittee does not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed onsite (or reclaimed off-site if the permittee has documentation showing that

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the permittee received back the exact same materials that were sent off-site) and reused in the coatings operation for which the permittee uses the emission rate with add-on controls option. If the permittee uses coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

Except as provided in 40 CFR Section 63.3960(a)(4), the permittee must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by Condition #018, using the procedures specified in Conditions #025, #026, #027 and #028.

The permittee must develop, implement, and document the implementation of the work practice plan required by Condition #019 during the initial compliance period, as specified in Condition #011.

The permittee must follow the procedures in paragraphs (a) through (g) of this section to demonstrate compliance with the applicable emission limit in Condition #001 for the source in each subcategory.

a. Determine the mass fraction of organic HAP, density, volume used, and volume fraction of coating solids. Follow the procedures specified in Condition #033 to determine the mass fraction of organic HAP, density, and volume of each coating, thinner and/or other additive, and cleaning material used during each month; and the volume fraction of coating solids for each coating used during each month.

b. Calculate the total mass of organic HAP emissions before add-on controls. Using Equation 1 of Condition #033, calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and/or other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which the permittee uses the emission rate with add-on controls option.

c. Calculate the organic HAP emission reduction for each controlled coating operation. Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month. The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (d) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which the permittee conducts liquid-liquid material balances.

d. Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balance. Use Equation 1 of this section to calculate the organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during each month. The permittee must assume zero efficiency for the emission capture system and add-on control device for any period of time a deviation specified in Condition #034 occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunction, unless the permittee has other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation.

$$H_c + (A_c + B_c + C_c - R_w - H_{unc}) (CE / 100 \times DRE / 100) \text{ (Equation 1)}$$

Where:

H_c = Mass of organic HAP emission reduction for the controlled coating operation during the month, pounds.

A_c = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, pounds, as

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calculated in Equation 1A of this section.

Bc = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, pounds, as calculated in Equation 1B of this section.

Cc = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, pounds, as calculated in Equation 1C of this section.

Rw = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSD for treatment or disposal during the compliance period, pounds, determined according to Condition #033. (The permittee may assign a value of zero to RW if the permittee does not wish to use this allowance.)

Hunc = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in Condition 3963(c) and (d) that occurred during the month in the controlled coating operation, pounds, as calculated in Equation 1D of this section.

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in Conditions #005 and #006 to measure and record capture efficiency.

DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in Conditions #005 and #007 to measure and record the organic HAP destruction or removal efficiency.

1. Calculate the mass of organic HAP in the coatings used in the controlled coating operation, pounds, using Equation 1A of this section:

$$As = [\text{Sum } (i = 1 \text{ thru } m)] (\text{Vol } c,i) \times (D \text{ } c,i) \times (W \text{ } c,i) \quad (\text{Equation 1A})$$

Where:

As = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, pounds.

Vol c,i = Total volume of coating, i, used during the month, gallons.

D c,i = Density of coating, i, pounds per gallon.

W c,i = Mass fraction of organic HAP in coating, i, pounds per pound. For reactive adhesives as defined in 40 CFR Section 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in Appendix A to Subpart PPPP of 40 CFR Part 63.

m = Number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners and/or other additives used in the controlled coating operation, kg (lb), using Equation 1B of this section:

$$Bc = [\text{Sum } (j = 1 \text{ thru } n)] (\text{Vol } t,j) \times (D \text{ } t,j) \times (W \text{ } t,j) \quad \text{Equation 1B}$$

Where:

BC = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, pounds.

Vol t,j = Total volume of thinner and/or other additive, j, used during the month, gallons.

D t,j = Density of thinner and/or other additive, j, pounds per gallon.

W t,j = Mass fraction of organic HAP in thinner and/or other additive, j, pounds per pound. For reactive adhesives as defined in 40 CFR Section 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in Appendix A to Subpart PPPP of 40 CFR Part 63.

n = Number of different thinners and/or other additives used.

3. Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, pounds, using Equation 1C of this section:

$$Cc = [\text{Sum } (k = 1 \text{ thru } p)] (\text{Vol } s,k) \times (D \text{ } s,k) \times (W \text{ } s,k) \quad (\text{Equation 1C})$$

Where:

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C_c = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, pounds.

$Vol_{s,k}$ = Total volume of cleaning material, k , used during the month, gallons.

$D_{s,k}$ = Density of cleaning material, k , pounds per gallon.

$W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k , pounds per pound.

p = Number of different cleaning materials used.

4. Calculate the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in the controlled coating operation during deviations specified in Condition #034, using Equation 1D of this section:

$$H_{unc} = [\text{Sum } (h = 1 \text{ thru } q)] (Vol_h) \times (D_h) \times (W_h) \quad (\text{Equation 1D})$$

Where:

H_{unc} = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in Condition #034 that occurred during the month in the controlled coating operation, pounds.

Vol_h = Total volume of coating, thinner and/or other additive, or cleaning material, h , used in the controlled coating operation during deviations, gallons.

D_h = Density of coating, thinner and/or other additives, or cleaning material, h , pounds per gallon.

W_h = Mass fraction of organic HAP in coating, thinner and/or other additives, or cleaning material, h , pounds organic HAP per pound coating. For reactive adhesives as defined in 40 CFR Section 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in Appendix A to Subpart PPPP of 40 CFR Part 63.

q = Number of different coatings, thinners and/or other additives, and cleaning materials used.

e. The permittee shall determine the total volume of coating solids used, gallons, which is the combined volume of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which the permittee uses the emission rate with add-on controls option, using Equation 2 of Condition #033.

f. The permittee shall determine the mass of organic HAP emissions, pounds, during each month, using Equation 4 of this section:

$$H(HAP) = H_e - [\text{Sum } (i = 1 \text{ thru } q)] (H_{c,i}) - [\text{Sum } (j=1 \text{ thru } r)] (H_{CSRj}) \quad (\text{Equation 4})$$

where:

$H(HAP)$ = Total mass of organic HAP emissions for the month, pounds.

H_e = Total mass of organic HAP emissions before add-on controls from all the coatings, thinners and/or other additives, and cleaning materials used during the month, pounds, determined according to paragraph (b) of this section.

$H_{c,i}$ = Total mass of organic HAP emission reduction for controlled coating operation, i , not using a liquid-liquid material balance, during the month, pounds, from Equation 1 of this condition.

H_{CSRj} = Total mass of organic HAP emissions reduction for coating operation, j , controlled by solvent recovery using a liquid-to-liquid material balance, during the month, pounds, from Equation 3 of this section.

q = Number of controlled coating operations not controlled by a solvent recovery system using a liquid-liquid material balance.

r = Number of coating operations controlled by a solvent recovery system using a liquid-to-liquid material balance.

g. The permittee shall determine the organic HAP emission rate for the compliance period, pounds of organic HAP emitted per gallon coating solids used, using Equation 5 of this section:

$$H_{annual} = \{[\text{Sum } (y = 1 \text{ thru } n)] H(HAP),y\} / \{[\text{Sum } (y = 1 \text{ thru } n)] V_{st,y}\} \quad (\text{Equation 5})$$

Where:

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H_{annual} = Organic HAP emission rate for the compliance period, pounds organic HAP emitted per gallon coating solids used.

$H(HAP)_y$ = Organic HAP emissions for month, y, pounds, determined according to Equation 4 of this condition.

$V_{st,y}$ = Total volume of coating solids used during month, y, gallons, from Equation 2 of Condition #033.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

h. The organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit in Condition #001. The permittee must keep all records as required by Conditions #001 and #012. As part of the notification of compliance status required by Condition #013, the permittee must identify the coating operation for which the permittee used the emission rate with add-on controls option and submit a statement that the coating operation was in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in Condition #001, and the permittee has achieved the operating limits required by Condition #018 and the work practice standards required by Condition #019.

025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3967]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance test required by Conditions #003 and #004, and described in Conditions #005, #006, and #007, you must establish the operating limits required by Condition #018 according to this section, unless you have received approval for alternative monitoring and operating limits under 40 CFR Section 63.8(f) as specified in Condition #018.

For each capture device that is not part of a PTE that meets the criteria of Condition #006, establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (a) and (b) of this condition. The operating limit for a PTE is specified in Table 1 of 40 CFR Part 63, Subpart Mmmm.

a. During the capture efficiency determination required by Conditions #003 and #004, and described in Conditions #005 and #006, the permittee must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in the emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

b. Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3968]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

The permittee shall install, operate, and maintain the CPMS required by Condition #028 and #029 according to the following.

a. The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. It must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.

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- b. The permittee must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.
- c. The permittee must record the results of each inspection, calibration, and validation check of the CPMS.
- d. The permittee must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.
- e. The permittee must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).
- f. The permittee must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. The permittee must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.
- g. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

027 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3968]

Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

The permittee must meet the requirements below for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

- a. The permittee must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified below.
 - 1. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.
 - 2. Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. The permittee must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.
 - 3. Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. The permittee must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.
 - 4. Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line

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away from the add-on control device to the atmosphere when the coating operation is running. The permittee must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.

5. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow direction indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. Each time the flow direction changes, the next reading of the time of occurrence and flow direction must be recorded. The flow direction indicator must be installed in each bypass line or air makeup supply line that could divert the emissions away from the add-on control device to the atmosphere.

b. If any bypass line is opened, the permittee must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports.

028 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3968]

Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

The capture system monitoring system must comply with the applicable requirements below and Condition #026.

a. For each flow measurement device, the permittee must meet the requirements below.

1. Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.

2. Use a flow sensor with an accuracy of at least 10 percent of the flow.

3. Perform an initial sensor calibration in accordance with the manufacturer's requirements.

4. Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.

5. Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.

6. Perform leak checks monthly.

7. Perform visual inspections of the sensor system quarterly if there is no redundant sensor.

b. For each pressure drop measurement device, the permittee must comply with the requirements below.

1. Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening to be monitored.

2. Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.

3. Perform an initial calibration of the sensor according to the manufacturer's requirements.

4. Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated

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pressure sources.

5. Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

6. Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.

7. Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

VII. ADDITIONAL REQUIREMENTS.

029 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3890]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What emission limits must I meet?

The coating operation is subject to Subpart Mmmm of the National Emission Standards for Hazardous Air Pollutants for Source Categories and shall comply with all applicable requirements of this Subpart. 40 CFR Section 63.13 requires submission of copies of all requests, reports, applications, submittals and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director of Air Protection Division
US EPA, Region III
1650 Arch Street
Philadelphia, Pa 19103-2029

030 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3891]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What are my options for meeting the emission limits?

The permittee must include all coatings (as defined in 40 CFR Section 63.3981), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Condition #001.

031 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3891]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What are my options for meeting the emission limits?

The permittee must demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), and the emissions reductions achieved by emission capture systems and add-on controls, the organic HAP emission rate for the coating operation is less than or equal to the applicable emission limit in Condition #001, calculated as a rolling 12-month emission rate and determined on a monthly basis. The permittee must also demonstrate that all emission capture systems and add-on control devices for the coating operation meet the operating limits required in Condition #018, except for solvent recovery systems for which the permittee conducts a liquid-liquid material balances according to Condition #024, and that the permittee meet the work practice standards required in Condition #019. The

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permittee meet all the requirements of 40 CFR Sections 63.3960 through 63.3968, as listed in this permit, to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.

032 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3901]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What parts of the General Provisions apply to me?

The permittee shall comply with the provisions of 40 CFR Part 63, Subpart A as they pertain to this source and are listed in Table 2 of 40 CFR Part 63, Subpart Mmmm.

033 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3951]

Subpart Mmmm - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

How do I demonstrate initial compliance with the emission limitations?

The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \quad (\text{Equation 1})$$

Where:

H_e = Total mass of organic HAP emissions during the month, kg(lbs).

A = Total mass of organic HAP in the coatings used during the month, kg(lbs), as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg(lbs), as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg(lbs), as calculated in Equation 1C of this section.

R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg(lbs), determined according to 40 CFR Part 63, Subpart Mmmm. (The permittee may assign a value of zero to R_w if the permittee does not wish to use this allowance.)

a. Calculate the kg(lbs) organic HAP in the coatings used during the month using Equation 1A of this section:

$$A = [\text{Sum } (i = 1 \text{ thru } m)] (\text{Vol } C_{c,i}) \times (D_{c,i}) \times (W_{c,i}) \quad (\text{Equation 1A})$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg(lbs).

$\text{Vol } C_{c,i}$ = Total volume of coating, i , used during the month, liters(gallons).

$D_{c,i}$ = Density of coating, i , kg(lbs) coating per liter(gallon) coating.

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$W_{c,i}$ = Mass fraction of organic HAP in coating, i , kg(lbs) organic HAP per kg(lb) coating. For reactive adhesives as defined in 40 CFR Section 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to 40 CFR Part 63, Subpart PPPP of this part.

m = Number of different coatings used during the month.

b. Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = [\text{Sum } (j = 1 \text{ thru } n)] (\text{Vol } t,j) \times (D_{t,j}) \times (W_{t,j}) \quad (\text{Equation 1B})$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg(lbs).

$\text{Vol } t,j$ = Total volume of thinner and/or other additive, j , used during the month, liters(gallons).

$D_{t,j}$ = Density of thinner and/or other additive, j , kg(lbs) per liter(gallons).

$W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j , kg(lbs) organic HAP per kg(gallon) thinner and/or other additive. For reactive adhesives as defined in 40 CFR Section 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to 40 CFR Part 63, Subpart PPPP of this part.

n = Number of different thinners and/or other additives used during the month.

c. Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = [\text{sum } (k = 1 \text{ thru } p)] (\text{Vol } s,k) \times (D_{s,k}) \times (W_{s,k}) \quad (\text{Equation 1C})$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg(lbs).

$\text{Vol } s,k$ = Total volume of cleaning material, k , used during the month, liters(gallons).

$D_{s,k}$ = Density of cleaning material, k , kg(lbs) per liter(gallon).

$W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k , kg(lbs) organic HAP per kg(lbs) material.

p = Number of different cleaning materials used during the month.

d. Determine the total volume of coating solids used, liters (gallons), which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$V_{st} = [\text{Sum } (i = 1 \text{ thru } m)] (\text{Vol } c,i) \times (V_{s,i}) \quad (\text{Equation 2})$$

Where:

V_{st} = Total volume of coating solids used during the month, liters(gallons).

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Vol c,i = Total volume of coating, i, used during the month, liters(gallons).

V s,i = Volume fraction of coating solids for coating, i, liter(gallons) solids per liter(gallon) coating, determined according to 40 CFR Section 63.3941(b).

m = Number of coatings used during the month.

e. Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gallon) coating solids used, using Equation 3 of this section:

$$H_{yr} = \{[\text{Sum } (y = 1 \text{ thru } n)] H_e\} / \{[\text{Sum } (y = 1 \text{ thru } n)] V_{st}\} \quad (\text{Equation 3})$$

Where:

H_{yr} = Average organic HAP emission rate for the compliance period, kg(lbs) organic HAP emitted per liter(gallon) coating solids used.

H_e = Total mass of organic HAP emissions from all materials used during month, y, kg(lbs), as calculated by Equation 1 of this section.

V_{st} = Total volume of coating solids used during month, y, liters(gallons), as calculated by Equation 2 of this section.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

f. The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the applicable emission limit for each subcategory in 40 CFR Section 63.3890 or the predominant activity or facility-specific emission limit. The permittee must keep all records as required by 40 CFR Sections 63.3930 and 63.3931. As part of the notification of compliance status required, the permittee must identify the coating operation(s) for which the permittee used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit, determined according to the procedures in this section.

034 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.3963]

Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

How do I demonstrate continuous compliance with the emission limitations?

To demonstrate continuous compliance with the applicable emission limit in Condition #001, the organic HAP emission rate for each compliance period, determined according to the procedures in Condition #024, must be equal to or less than the applicable emission limit in Condition #001. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in Condition #003 is the end of a compliance period consisting of that month and the preceding 11 months. The permittee must perform the calculations in Condition #024 on a monthly basis using data from the previous 12 months of operation. If the permittee is complying with a facility-specific emission limit, the permittee must also perform the calculation using Equation 1 in 40 CFR Section 63.3890 on a monthly basis using the data from the previous 12 months of operation.

If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in Condition #001, this is a deviation from the emission limitation for that compliance period that must be reported as

SECTION D. Source Level Plan Approval Requirements

specified in Conditions #013 and #014.

The permittee must demonstrate continuous compliance with each operating limit required by Condition #018 that applies to you, as specified in Table 1 to this subpart, when the coating line is in operation.

a. If an operating parameter is out of the allowed range specified in Table 1 to 40 CFR Part 63, Subpart Mmmm, this is a deviation from the operating limit that must be reported as specified in Conditions #013, #014 and #015.

b. If an operating parameter deviates from the operating limit specified in Table 1 to 40 CFR Part 63, Subpart Mmmm, then the permittee must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation, unless the permittee has other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator.

The permittee must meet the requirements for bypass lines in Condition #027 for controlled coating operations for which the permittee does not conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as specified in Conditions #013, #014 and #015. For the purposes of completing the compliance calculations specified in Condition #024, the permittee must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of Condition #024.

The permittee must demonstrate continuous compliance with the work practice standards in Condition #019. If the permittee did not develop a work practice plan, or the permittee did not implement the plan, or the permittee did not keep the records required by Condition #011, this is a deviation from the work practice standards that must be reported as specified in Conditions #013, #014 and #015.

As part of each semiannual compliance report required in Condition #014, the permittee must identify the coating operation for which the permittee used the emission rate with add-on controls option. If there were no deviations from the emission limitations, submit a statement that the permittee was in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in Condition #001, and the permittee achieved the operating limits required by Condition #018 and the work practice standards required by Condition #019 during each compliance period.

During periods of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency, you must operate in accordance with the startup, shutdown, and malfunction plan required by Condition #020.

The permittee must maintain records as specified in Conditions #011 and #012.



SECTION E. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.



SECTION F. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.



SECTION G. Miscellaneous.



***** End of Report *****
